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EXAMINER

RAYFORD, SANDRA M

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,238

Applicant(s)

BREINING ET AL.

Examiner

Sandra M. Nolan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-67 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 16-67 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-30-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claims

1. After entry of the 15 December 2004 preliminary amendment, claims 16-67 are pending. Claims 1-15 have been cancelled.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 30 March 2004 was considered by the examiner.

Priority

3. For priority benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference to the parent case(s) must include the relationship of the applications. *Also, the status of nonprovisional parent application(s) (whether patented or abandoned) should also be included.*

If a parent application has become a patent, the expression "now Patent No. _____" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.

Summary of Base Claims and Examiner Notes

4. At the request of her supervisor, the examiner summarizes all independent, or base, claims here.

Claim 16 covers a heat-insulating paper container made from a paper body member having:

-an inside surface laminate of a polyethylene-containing mixture to prevent penetration of liquid into the paper and

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-an outside surface laminate of foamed polyethylene,
with the body member bonded to a bottom panel member that has upper and bottom surfaces,
wherein the polyethylene-containing mixture forms a liquid tight seal between the body and the bottom panel member.

Claim 42 covers a method making a heat-insulating paper container from a paper-based body member having inside and outside surfaces and a paper-based bottom panel member with upper and bottom surfaces, the method comprising:
-applying, to the inside surface of the body, a polyethylene-containing mixture to prevent penetration of liquid into the paper, wherein the polyethylene-containing mixture comprises a material that forms a liquid tight seal between the body and the bottom panel member;
-applying to the outside of the body member a laminate that foams during fabrication;
and
-fabricating the container so that the body and bottom panel members are bonded to each other.

Note: The examiner interprets certain claim terms as follows:

- a. The phrase “inside surface laminate” (claim 16) is deemed to mean that the inside of the container body has a laminate on its surface.
- b. The “bottom panel member” (claims 16 and 42) is deemed to be the bottom, or base, of the container.
- c. The phrase “paper-based” (claim 42) is deemed to include paper.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 16-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amberg (US 3,445,892) in view of applicants' admissions on page 2 of their specification.

Amberg teaches paper cups (col. 1, lines 29-34) with bodies **20** and bottoms **25**. The cups have polyethylene/polypropylene laminates in their inner surfaces (col. 2, line 68 through col. 3, line 2). The cups do not leak (col. 2, line 2).

On page 2 of the specification, in the first through the fourth paragraphs, applicants discuss the prior art as teaching the use of polyethylene-containing laminates on one or more of the inner and outer surfaces of paper containers in order to prevent leaks through the inner surface (third paragraph) and make the outer surface foamable for insulation purposes (second and fourth paragraphs).

The citations are analogous because they both deal with processes for making paper cups and cups made thereby.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the outer foamable polyethylene laminates described as known in the specification on the cups of Amberg in order to produce insulating outer foams thereon.

The motivation to employ the outer foamable polyethylene laminates described as known in the specification on the cups of Amberg is found in the second and fourth paragraphs on page 2 of the specification, where the outer laminates are said to make the outer surface foamable for insulation purposes.

It is deemed desirable to make cups that are leakproof and insulated so that hot or cold liquids can be housed and transported therein.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. In all of the double patenting rejections in this office action, the instant application and the patent discussed share at least one inventor.

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9. Claims 42-67 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,129,653. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method claimed here is clearly suggested by the method steps of the '653 claims, which include making paper cups by:

- applying a polyethylene inside laminate,
- applying a foamable outside laminate, and
- fabricating the cup so that the body and bottom members are bonded and the outside laminate is foamed.

It fails to teach the laminates of applicants' claims.

It would have been obvious engineering choice to employ any suitable laminates in the process of the '653 claims in order to produce insulated paper cups.

10. Claims 16-67 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6,482,481. Although the conflicting claims are not identical, they are not patentably distinct from each other because the containers/method claimed here are clearly suggested by the containers of the '481 claims, which include:

- a polyethylene inside laminate,
- a foamable outside laminate, and
- a cup made so that the body and bottom members are bonded and the outside laminate is foamed.

It would have been obvious engineering choice to employ any suitable laminates in making the cups of the '481 claims.

11. Claims 16-67 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,565,934. Although the conflicting claims are not identical, they are not patentably distinct from each other because the containers/method claimed here are clearly suggested by the containers of the '934 claims, which include:

- a polyethylene inside laminate,
- a foamable outside laminate, and
- a cup made so that the body and bottom members are bonded and the outside laminate is foamed.

It fails to teach the laminates of applicants' claims.

It would have been obvious engineering choice to employ any suitable laminates in making the cups of the '934 claims.

12. Claims 42-67 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,675,586. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method claimed here is clearly suggested by the method steps of the '586 claims, which include making paper cups by:

- applying a polyethylene inside laminate,
- applying a foamable outside laminate, and

-fabricating the cup so that the body and bottom members are bonded and the outside laminate is foamed.

It fails to teach the laminates of applicants' claims.

It would have been obvious engineering choice to employ any suitable laminates in the process of the '586 claims in order to produce insulated paper cups.

13. Claims 16-67 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,142,331 in view of Amberg.

The '331 claims cover containers having an outside surface laminate of foamed polyethylene.

They do not recite the inner laminates of applicants' claims.

Amberg is discussed above. Its inner laminated cups do not leak (Amberg, col. 2, line 2).

The '331 claims and Amberg are analogous because both deal with paper cups having polyethylene layers thereon.

It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the inner laminate layer of Amberg on the cups of the '331 claims in order to help prevent leaks.

The motivation to employ Amberg's inner laminates is found at col. 2, line 2 of Amberg, where it teaches that its cups do not leak.

It is deemed desirable to make cups that do not leak to enhance consumer acceptance.

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14. Claims 16-67 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,663,927 in view of Amberg.

The '927 claims cover containers having an outside surface laminate of foamed polyethylene.

They do not recite the inner laminates of applicants' claims.

Amberg is discussed above. Its inner laminated cups do not leak (Amberg, col. 2, line 2).

The '927 claims and Amberg are analogous because both deal with paper cups having polyethylene layers thereon.

It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the inner laminate layer of Amberg on the cups of the '927 claims in order to help prevent leaks.

The motivation to employ Amberg's inner laminates is found at col. 2, line 2 of Amberg, where it teaches that its cups do not leak.

It is deemed desirable to make cups that do not leak to enhance consumer acceptance.

15. Claims 16-41 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,703,090 in view of page 2 of applicants' specification.

The '090 claims cover paper containers having an inside surface layer of a polyethylene laminate to improve the seal between the bottom and the body.

It is well known that improving the seal between the bottom and the body of a paper cup will help prevent leaks.

They do not recite an outer foamed/foamable polyethylene layer.

On page 2 of the specification, in the first through the fourth paragraphs, applicants discuss the prior art as teaching the use of polyethylene-containing laminates on one or more of the inner and outer surfaces of paper containers in order to prevent leaks through the inner surface (third paragraph) and make the outer surface foamable for insulation purposes (second and fourth paragraphs).

The citations are analogous because they both deal with processes for making paper cups and cups made thereby.

It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the outer surface layer of the specification on the cups of the '090 claims in order to give them insulating properties.

The motivation to employ the outer surface layer of the specification on the cups of the '090 claims is found in the second and fourth paragraphs on page 2 of the specification, where insulation is discussed.

It is deemed desirable to make cups that are leakproof and insulated so that hot or cold liquids can be housed and transported therein.

16. Claims 1-67 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 5,766,709 in view of page 2 of the specification.

The '709 claims cover insulating containers with an insulation layer on its base.

Page 2 of the specification is discussed above.

The citations are analogous because they both deal with processes for making paper cups and cups made thereby.

It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the inner surface layer of the specification on the cups of the '709 claims in order to give help make them leakproof.

The motivation to employ the outer surface layer of the specification on the cups of the '709 claims is found in the third paragraph on page 2 of the specification, where prevention of liquid penetration is discussed.

Cups which liquids do not penetrate are deemed leakproof.

It is deemed desirable to make cups that are leakproof and insulated so that hot or cold liquids can be housed and transported therein.

17. Claims 42-67 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,030,476 in view of page 2 of the specification.

The '476 claims cover methods of making an insulated paper base stock material by treating the base with a resin film and foaming the film.

Page 2 of the specification is discussed above.

The citations are analogous because they both deal with processes for making paper cups and cups made thereby.

It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the inner surface layer of the specification on the stock

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materials of the '476 claims in order to give help make them leakproof and to make cups therefrom, as taught in all four paragraphs on page 2.

The motivation to employ the inner surface layer of the specification on the stock materials of the '476 claims in order to give help make them leakproof and to make cups therefrom is found in the third paragraph on page 2 of the specification, where prevention of liquid penetration is discussed and on the entire page, where the production of cups is described.

Cups which liquids do not penetrate are deemed leakproof.


It is deemed desirable to make cups that are leakproof and insulated so that hot or cold liquids can be housed and transported therein.

Conclusion

Any inquiry concerning this communication should be addressed to Sandra M. Nolan-Rayford, at telephone number 571/272-1495. She can be reached Monday through Thursday, from 6:30 am to 4:00 pm, ET.

If attempts to reach the examiner are unsuccessful, contact her supervisor, Harold Pyon, at 571/272-1498.

The fax number for patent application documents is 703/872-9306.


S. M. Nolan-Rayford
Primary Examiner
Technology Center 1700

10734238(20050219)